REMARKS

At the outset, the Applicants wish to thank Patent Examiner Douglas J. Duff for the many courtesies extended to the undersigned attorney during the Telephone Interview on March 4, 2008. The substance of this Telephone Interview is set forth in the Examiner Interview Summary, and in this Amendment.

The amendments to this patent application are as follows. Product claim 1 has been cancelled, and method claim 13 has been rewritten in independent claim format.

Method claim 13 was rewritten in independent claim format to include the subject matter of cancelled claim 1, and further including the terminology that the "sintering pressure is sufficient to achieve a material density of 6.8 to 7.4 g/cm^3." This added language is supported by the first paragraph on Page 5 of the Specification and provides a definition of the term

"sufficient pressure."

Claims 2 to 12 have been amended to change the dependency, such that each of these claims now depends from independent method claim 13. Also, each of claims 2 to 12 was revised to recite the term "method" and to cancel the term "rotor."

On Page 2 of the Office Action, the Patent Examiner has rejected claims 1-14 under 35 U.S.C. 112, second paragraph as being indefinite due to the word "sufficient."

For the reasons stated above, it is believed that the term "sufficient" is properly defined in amended claim 13. Withdrawal of this ground of rejection is respectfully requested.

Also on Page 2 of the Office Action, the Patent Examiner has rejected claims 1-7 and 12-14 under 35 U.S.C. 103(a) as being obvious in view of *Hertell (DE 4020082A1)*.

On Page 5 of the Office Action, the Patent Examiner has rejected claim 8 under 35 U.S.C. 103(a) as being unpatentable over *Hertell* in view of *Straus (DE 19703499 A1)*.

On Page 6 of the Office Action, the Patent Examiner has rejected claims 9-11 under 35 U.S.C. 103(a) as being unpatentable over *Hertell* in view of *Straus* as applied to claim 8 and further in view of *Yoshida (JP 401142287A)*.

The present invention is directed to a method for producing a sintered metal rotor of a rotary piston pump, in particular a rotary piston pump for generating a vacuum of a vacuum brake booster of a motor vehicle, where the brake booster can be connected to a vacuum pump intake connection, with a pot-shaped base body (1) and a bearing journal element which protrudes centrally from the bottom of this base body (1) from a cylindrical foot area coming directly out of the bottom and a

connecting claw section (2) to be connected to it for a coupling element to be attached, comprising the features

- the connecting claw section (2) is designed in the form of two protruding individual webs (3),
- the individual webs (3) are diametrically opposed in the outside circumferential area of the cylindrical base section in an area limited to max. 100° at the circumference and radially to max. 25% of the diameter of the cylindrical base section, and

assigning separate rams to the individual webs (3) according to cross section of the web and providing each ram with a separate pressure acting on them in a sintering compression mold for producing the sintered rotor; and

wherein the produced rotor has the structure of a one piece, press-sintered rotor with differently compressed regions, whereby the individual webs (3) are compressed to a sufficient degree for

the material stability required in each region, and the sintering pressure is sufficient to achieve a material density of 6.8 to 7.4 g/cm^3.

On Page 4 of the Office Action, it was stated that "Hertell teaches that the rotor and coupling are comprised of a sintered metal material, but is silent as to the method of making."

On Page 5 of the Office Action, it was stated that "Thus, even though Hertell is silent as to the process used to make the sintered rotor, it appears that the product in Hertell would be the same or similar as that claimed;"

On Page 6 of the Office Action, it is stated that "Hertell discloses a one piece rotor as claimed in the present invention. While Hertell fails to disclose a one piece rotor during the entire life of assembly, in the final state of assembly (Fig. 1),

the rotor is one piece."

With regard to the present invention, the claimed method produces a rotor which is one-piece and press-sintered with differently compressed regions. There are two connecting claw individual webs (3) that are press-sintered by sintering compression rams that are designed based on the cross-sectional area. These rams are separately operable by the other sintering compression rams that are necessary to create the rotor and whereby the individual webs (3) are compressed with adequate strength for continuous operation of the rotor.

It is to be emphasized that the inventive produced rotor is continuously made as a one-piece-rotor. The prior art assembly is therefore not one piece, like the 3-part rotor in *Hertell*. However, the claimed rotor is made of one-piece.

Hertell does not disclose a one-piece rotor. The rotor of *Hertell* consists of three pieces (See col. 2, line 49-53, col. 3, line 14-16). These three pieces in *Hertell* could be welded or stuck together after producing them. Hence, the rotor of *Hertell* is completely different from the rotor produced by the claimed method of the present invention.

Therefore, the prior art references fail to teach or to suggest the claimed process steps of assigning separate rams to the individual webs (3) according to cross section of the web and providing each ram with a separate pressure acting on them in a sintering compression mold for producing the sintered rotor; and wherein the produced rotor has the structure of a one piece, press-sintered rotor with differently compressed regions, whereby the individual webs (3) are compressed to a sufficient degree for the material stability required in each region, and the sintering pressure is sufficient to achieve a material density of 6.8 to

7.4 g/cm^3.

There is no combination of the prior art references to *Hertell, Straus,* and *Yoshida* which teaches these process steps. This is because *Hertell* teaches producing a multipart rotor. *Straus* teaches producing a multipart rotor; and *Yoshida* teaches producing a multipart rotor.

In summary, it is claimed that the rotor is press-sintered in one piece (monolithic). In *Hertell*, there are a total of three single parts which are manufactured individually and then built into a rotor. In contrast thereto, in the claimed invention, the rotor does not consist of three single pieces but consists of one piece only which is also press-sintered in this monolithic form (compare FIG. 1).

For all of the above reasons, none of the prior art

references provide an identical disclosure of the claimed invention. Hence, the present invention is not anticipated under 35 U.S.C. 102, but is patentable under 35 U.S.C. 103 over all the prior art applied by the Patent Examiner. Withdrawal of these grounds of rejection is respectfully requested. A prompt notification of allowability is respectfully requested.

Respectfully submitted,

Peter GRAHLE ET AL.

COLLARD & ROE, P.C.
1077 Northern Boulevard
Roslyn, New York 11576
(516) 365-9802
ERF:lgh

Allison C. Collard, Reg.No.22,532
Edward R. Freedman, Reg.No.26,048
Frederick J. Dorchak, Reg.No.29,298
Attorneys for Applicant

I hereby certify that this correspondence is being filed electronically with the United States Patent and Trademark Office on April 8, 2008.

Edward R. Freedman